

Update: SARS-CoV-2 Variants of Concern



Leahgrace Simons, MPH

COVID-19 Health Information Guidance Writer

Virginia Department of Health

leahgrace.simons@vdh.virginia.gov

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Overview

- New WHO Naming Labels
- Variant Classification Schemes
- Delta Variant: Virginia Updates
- What We Can Do

New WHO Labeling System for Variants

- On May 31, WHO introduced a new labeling system that assigned simple, easy to say and remember labels using letters of Greek alphabet (i.e., Alpha, Beta, Gamma, etc.)
- Labels do not replace existing scientific names (e.g. those assigned by GISAID, Nextstrain and Pango), which convey important scientific information and will continue to be used

U.S. Variant Classification Scheme

- A U.S. government interagency group developed a [Variant Classification Scheme](#) that defines 3 classes of variants:
 - **Variants of Interest (7)**
 - Eta (B.1.525), Iota (B.1.526), B.1.526.1, B.1.617, Kappa (B.1.617.1), B.1.617.3, Zeta (P.2)
 - **Variants of Concern (6)**
 - Alpha (B.1.1.7), Beta (B.1.351), Epsilon (B.1.427 & B.1.429), Gamma (P.1), Delta (B.1.617.2)
 - **Variants of High Consequence (0)**

Emerging Variants: Name Changes

Variants of Interest (VOI)		Variants of Concern (VOC)*	
WHO/CDC Label Name	Pango Linage Name	WHO/CDC Label Name	Pango Linage Name
Eta	B.1.525	Alpha	B.1.1.7
Iota	B.1526	Beta	B.1.351
--	B.1.526.1	Gamma	P.1
--	B.1.617	Epsilon	B.1.427 & B.1.429
Kappa	B.1.617.1	Delta	B.1.617.2
--	B.1.617.3	*Arranged in the order they were declared a variant of concern in the U.S.	
Zeta	P.2		

Delta Variant (B.1.617.2) Overview

- First identified globally in India
- First identified in the U.S. on March 2021
- **Spreads more easily and quickly** than other variants, but more studies are needed to determine how much more easily it spreads
- **Might cause increased risk of serious illness or death**, but this is being monitored

Delta Variant (B.1.617.2) Overview

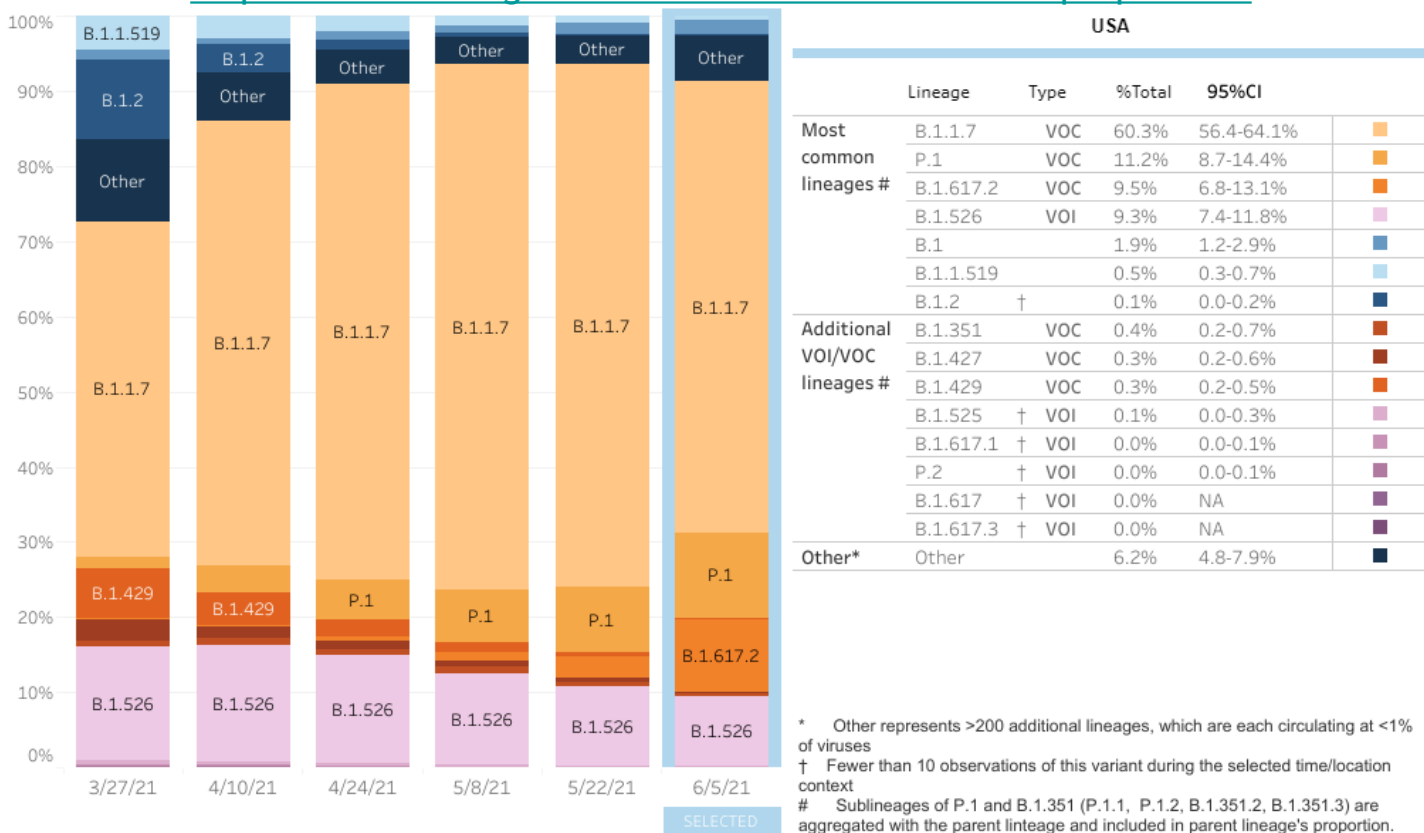
- **Potential reduction of immune protection** offered by vaccination or natural infection, but this is being monitored
- **Potential impact on some, but not all, monoclonal antibody therapies**, but the clinical implications of this decrease are not known and are being monitored
- **No real impact on diagnostic testing**

Growing Updates for Delta (B.1.617.2)

- [WHO reported](#) on 6/23 that 6 more countries have detected Delta variant, raising total to 85
- In [6/23 risk assessment](#), European Centre for Disease Prevention and Control (ECDC) estimated that Delta variant will make up 90% of SARS-CoV-2 viruses in Europe by end of August
- Delta variant now [accounts](#) for 20% of new cases, according to Dr. Anthony Fauci
- COVID-19 vaccines protect against Delta

CDC: Variant Proportions in the U.S.

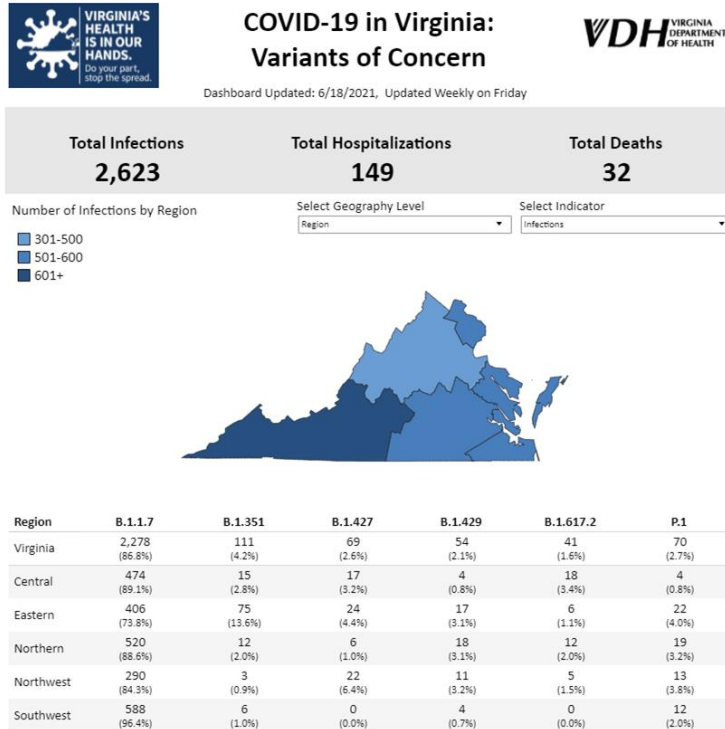
<https://covid.cdc.gov/covid-data-tracker/#variant-proportions>



Collection date, two weeks ending

VDH: Variants of Concern Dashboard

<https://www.vdh.virginia.gov/coronavirus/covid-19-data-insights/variants-of-concern/>



- VDH Dashboard was updated to include Delta (B.1.617.2) variant
- Data are updated weekly; data shown here were last updated June 18, 2021
- Proportions of variants do not represent total number that may be circulating

What Can We Do? Stop the spread!

- The best way to stop variants from developing in the first place is to stop virus from spreading (and replicating)
- Public health recommendations for stopping COVID-19 spread will work for all COVID-19 variants
 - Get vaccinated
 - Stay home if you are sick with COVID-19
 - If not yet fully vaccinated, then wear a mask, stay at least six feet apart, avoid crowds and poorly ventilated spaces, wash hands often, and stay home if have COVID-19 symptoms or close contact exposure

Additional Variant Resources

- VDH: [Variant Webpage](#)
- VDH: [Variant Dashboard](#)
- CDC: [SARS-CoV-2 Variant Classifications and Definitions](#)
- CDC: [Variant Proportions in the U.S.](#)
- WHO: [Tracking SARS-CoV-2 variants](#)
- CDC: [About Variants of the Virus that Causes COVID-19](#)
- CDC: [Genomic Surveillance for SARS-CoV-2 Variants](#)
- CDC: [Emerging SARS-CoV-2 Variants](#)
- CDC: [Requirement for Proof of Negative COVID-19 Test or Recovery from COVID-19 for All Air Passengers Arriving in the United States](#)

Thank you! Questions?



Contact Information:

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